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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,041	09/22/2003	Ann M. Panek	FER-15009	7293
7609	7590	07/05/2005	EXAMINER	
RANKIN, HILL, PORTER & CLARK, LLP 925 EUCLID AVENUE, SUITE 700 CLEVELAND, OH 44115-1405			LEE, RIP A	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 07/05/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,041

Applicant(s)

PANEK ET AL.

Examiner

Rip A. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-11 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action follows a response filed on April 20, 2005. Applicants have amended claims 1, 2, 6, and 9. New claim 11 was added. Claims 1-11 are pending.

Claim Rejections - 35 USC § 102 / 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang *et al.* (U.S. 5,439,628).

Huang *et al.* discloses a composition comprised of 70-100 phr of propylene resin, 0-30 phr of polyethylene resin, 2-40 phr matrix modifier, 0-450 phr filler, 0.1-5 phr processing aid (col. 5, lines 19-28). Propylene resin is a homopolymer (col. 5, line 41), and polyethylene resin is LLDPE containing 7-20 mole % of α -olefin comonomer (col. 6, lines 4-8). Nonionic antistatics in the amount of 0-10 phr may be included to prevent build up of static. These include non-ionic antistatics such as ethoxylated fatty acid amine (col. 7, lines 23-32). The ethoxylated fatty acid amine is also a surfactant. The small amount of processing aid would not materially affect the basic and novel characteristics of the claimed invention. As such, the subject matter of the claim is taught adequately by the prior art.

3. Claims 1, 3, 4, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue *et al.* (U.S. 5,254,617).

Inoue *et al.* discloses a composition comprising 35-87 pw of high density polyethylene (homopolymer), 3-25 pw of a propylene-based polymer, 10-45 pw talc, 1-10 pw of CaO, and 0.05-1.0 pw of surface active agent (claim 1). The propylene-based copolymer contains up to 10 mole % of comonomer (col. 3, line 12). Nonionic surfactants include polyoxyethylene sorbitan fatty acid esters as well as sorbitan fatty acid esters. Since talc and CaO are inert fillers, their use in minor amounts would not materially affect the basic and novel characteristics of the claimed

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invention. As such, the subject matter of the claim is taught adequately by the prior art. The process is also taught in columns 6-7, which describes extrusion methods.

4. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue *et al.* (U.S. 5,254,617) in view of Ohkawa *et al.* (U.S. 4,098,752).

The discussion of the disclosures of the prior art of Inoue *et al.* from the previous paragraph is incorporated here by reference. The reference does not disclose the exact identity of polyoxyethylene sorbitan fatty acid esters. Ohkawa *et al.* teaches that polyoxyethylene sorbitan fatty acid esters which are incorporated into polyolefin thermoplastics are polyoxyethylene sorbitan monooleate, polyoxyethylene sorbitan trioleate, polyoxyethylene sorbitan monopalmitate, polyoxyethylene sorbitan monopalmitate, polyoxyethylene sorbitan tristearate, and polyoxyethylene sorbitan trioleate (col. 2, lines 1-9, claim 2). Thus, one of ordinary skill in the art would have found it obvious to use the compounds disclosed in the secondary reference in the invention of Inoue *et al.* and thereby arrive at the claimed invention. The combination is obvious because Inoue *et al.* contemplates use of polyoxyethylene sorbitan fatty acid esters, and clearly, Ohkawa *et al.* supplies the otherwise obvious names of such compounds.

5. Claim 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue *et al.* (U.S. 5,254,617) in view of Ohkawa *et al.*

The discussions from paragraphs 3 and 4 are incorporated here by reference. Whereas Inoue *et al.* discloses an upper limit of 1 pw of surface active agent, the present claims require about 1.25 wt %. It is apparent, however, that the instantly claimed amount and that taught by in the prior art are so close to each other that the fact pattern is similar to the one in *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) where, despite a slight difference in the ranges, the court held that such a difference did not “render the claims patentable,” or, alternatively, that “a *prima facie* case of obviousness exists where the claimed range and prior art range do not overlap, but are close enough so that one skilled in the art would have expected them to have the same properties.”

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In light of the case law cited above, and given that there is only a slight difference between the amount of 1 pw disclosed by Inoue *et al.* and the amount disclosed in the present claims and further, given the fact that no criticality is disclosed in the present invention with respect to the amount of about 1.25 wt %, it would have been obvious to one of ordinary skill in the art that the amount recited in the present claims is but an obvious variant of the amounts disclosed in the prior art, and accordingly, one of ordinary skill in the art would have arrived at the claimed invention.

The subject matter of claim 7 is obvious over the secondary reference, Ohkawa *et al.*, which teaches the compounds that are classified as polyoxyethylene sorbitan fatty acid ester. Finally, Inoue *et al.* is silent with respect to the physical properties recited in claim 8. However, in light of the fact that the polymer mixture disclosed in the prior art is essentially the same as that being claimed, a reasonable basis exists to believe that it exhibits essentially the same properties. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

6. Claims 1, 3, 4, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Rogers *et al.* (U.S. 5,290,822) for the same reasons set forth previously.

Briefly, Rogers *et al.* teaches a composition comprised of a non-elastomeric olefin polymer selected from ethylene homopolymer or propylene homopolymer, about 3-30 pw of an elastomer resin, 1-15 pw of a polystyrene, and a stability control agent selected from partial esters of long chain fatty acids (claim 1). A suitable elastomer for the invention is ethylene-propylene copolymer rubber (EPR) containing about 30-72 w % ethylene and 28-70 wt % of propylene (col. 4, line 44). Stability control agents include partial esters of long chain fatty acids (surfactants) such as sorbitan mono-, di-, and trioleates (lines 14-21). There is also mentioned polyoxyethylene sorbitan tetrastearate in col. 5, line 68 from U.S. Patent No. 4,214,054, the contents of which are incorporated by reference (see col. 5, line 8 of Rogers *et al.*). This compound is an ethoxylated sorbitan fatty acid ester. The stability control agent is used in an amount of 0.5-10 pw based on 100 pw of olefin polymer resin (col. 6, line 12). General injection molding methods are discussed in columns 6 and 7.

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7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers *et al.* in view of Davis (U.S. 4,333,974) for the same reasons set forth in the previous office action.

The compositions of Rogers *et al.* have a variety of end uses as described in U.S. Patent No. 4,323,528 (Collins), the contents of which are incorporated by reference (see Rogers *et al.*, col. 8, line 47). According to the Collins reference, the foamed product has utility as an art form (col. 8, line 31). Further application as described in present claim 10 is not recited in either reference. Davis shows that foamed balls are used to make art forms such as figurines (see Figures). Here, detailed facial features are painted onto the foamed ball (col. 2, line 4 and col. 3, line 55 – col. 4, line 35). Thus, it would have been obvious to one having ordinary skill in the art to paint the molded part of Rogers *et al.* when it is used as an art form because, as shown in the Davis patent, such an art form is painted.

8. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakazawa *et al.* (JP 56-005842).

Nakazawa *et al.* discloses a composition comprising 100 pw of a polyolefin based resin, 1-20 pw of a polyolefin-based rubber, 10-30 pw of polybutene, and 0.1-10 pw of sorbitan fatty acid ester (abstract). The sorbitan fatty acid ester also qualifies as surfactant since it imparts surfactant qualities. The polyolefin based resin is an isotactic, syndiotactic, or atactic polypropylene homopolymer, and for film purposes, isotactic polypropylene homopolymer is preferred (col. 3, lines 15-20 and col. 4, lines 1-4). The poly-olefin based rubber is an ethylene-propylene copolymer or an ethylene-butene copolymer (col. 4, lines 26-28). In addition to sorbitan fatty acid esters, fatty acid esters of propylene glycol and glycerin may also be used (col.7, lines 5-7).

9. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the cited references teaches incorporation of no more than 8 wt % of mineral oil or polybutene, and without fair suggestion in the teachings therein, one of ordinary skill would not have found it obvious to modify the compositions of the prior art in order to arrive at the claimed subject matter.

Response to Arguments

10. The rejection of claims over Tabara *et al.* has been withdrawn. Applicants are correct in pointing out that the claimed invention is not disclosed in the prior art.

Applicants traverse the rejection of claims over Rogers *et al.* Applicants submit that the prior art does not teach the subject matter of the amended claims because the transitional phrase “consisting essentially of” precludes the materials described in the patent. Applicants note that Rogers *et al.* makes use of a blowing agent to make a foam and that this differs from the composition of the instant invention, which is not a foam. The examiner appreciates the difference in physical form of the two materials, however, the form in which the material appears is not defined in the instant claims, and therefore, it bears no patentable weight. Blowing agents generally liberate gaseous products and do not remain in the composition, and any adventitious residue would not materially affect the basic and novel characteristics of the claimed invention. As such, it is maintained that the subject matter of the claim is met by the prior art.

In view of this and previous discussions, the rejection has not been withdrawn.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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June 15, 2005



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